Department of Financial and Banking

College of Administration and Economic

University of Salahaddin-Erbil University

Subject: Computer Level 2

Course Book :(Year 2) / Second semester

Lecturer's name: MSc. Farhang A. Elias

Academic Year: 2023 - 2024

Course Book

1. Course name	Computer C (MS.Access)
2. Lecturer in charge	Farhang A. Elias
3. Department/ College	Financial and Banking/ Administration and Economic
4. Contact	e-mail: farhang.elias@su.edu.krd Tel: +964 750 449 5274
5. Time (in hours) per week	Theory: 1 hours Practical: 2 hours
6. Office hours	Monday : 8:30 - 12:30 & Wednesday 9:30 – 11:30
7. Teacher's academic profile	https://academics.su.edu.krd/farhang.elias/
8. Keywords	Database, Bank System, Financial Accounting, Data Analysis, Data Management

9. Course overview:

Introduction :

  The importance of the subject of the Computer Level C, The general purpose of this course is to study the basic concepts of programming using MS. Access Database Practice, To provide students with basic computer skills necessary for advanced enrich the intellectual share and art in the fields of Database and its various applications with banks System and prepare a generation of graduates qualified specialist in the field of computer science to work in the public and private sectors, and in specialized areas. Deepen the concepts of database systems in banks based on technical elements. As well as the difference between these systems and database systems in the traditional banking system.

  Database systems based on the fundamentals and concepts of database systems based on technical elements. The difference between them and the relational database systems. The elements are not simple and compound. Dynamic Link and inherit the qualities of the elements. Systems management technology databases and query languages elements.

  The data is organized in some manner so that the information contained within the database can be easily retrieved. Some of the simple databases that you might be familiar with are things like phone books or Banking Accounting. As data processing has become more sophisticated, so have methods for collecting, storing and retrieving information. Databases have become the cornerstone for an overwhelming amount of the computing environment in existence.

10. Course objective:

  Student supply issues in the field of modern database systems and applications software ready in banks. The course will introduce the students to the Microsoft Access Database practice for the banking and Finance for Accenting system, in particular, familiarizing them with the Computer Database.

This course is intended as a reference book for students, professionals and research workers who need to apply programming to a large variety of practical problems using Ms. Access Database Management. The key objective of this course is to deliver a preparatory coverage

of the Database and also building Data Analysis of Function Banking and Financial Analysis as well.

11. Student's obligation

Students have the obligation to participate in course examinations and other assessed performances. Examination frauds and copying of assignments or material are not allowed. Students are anticipated to attend classes and to submit assignments on the due date, for late submissions they will be penalised. Students are also expected to participate in tutorials. That the students are ready to conduct surprise examinations (Quizzes) that may be conducted by teaching to make sure that over the course of the follow-up article to the students in time of need. Students should do to prepare summary reports whenever the need arises and can teaching that the dividing students into groups each group to prepare various reports of the type, according to the vocabulary material and topics that will be covered during anchored year or regard to article of sub-themes.

12. Forms of teaching

Several forms of teaching will be used to reach the objectives of the course: power point presentation for the head titles and summary of conclusion with applications by designing a Visual Basic code to create variety application that could be used in different areas. Furthermore, students will content homework. There will be classroom discussions and the lecture will give enough background to, solve, analyses, and evaluate problems sets.

13. Assessment scheme

The students are required to do two closed book exams during the academic year besides the assignments;

- Mid- term Exam: 50% (two exams at the mid of each semester)

    1st **Mid- term Exam**: 10 % (Theory) and 15% (Practical)

    2nd **Mid- term Exam**: 10 % (Theory) and 15% (Practical)

- Final Exam: 50% = 25% (Theory) and 25% (Practical)

14. Student learning outcome:

At the end of this course, students are expected to be confident Microsoft Excel Programming. They will be able to formulate intermediate and some advanced Accounting System and using it in Data Financial Analysis, data analysis and some other Function Financial Management ways.

Students should be able to create List Accounting with Database and Data reports. By the end of this course, the students should have the ability to work in both public and private sectors as having good skills in Accounting System. Without database management, tasks have to be done manually and take more time. Data can be categorized and structured to suit the needs of the company or organization. Data is entered into the system and accessed on a routine basis by assigned users.

15. Course Reading List and References:

▪ Key references: Learning Finical Function to Access Database and Creating Application with Bank Accounting System.
▪ Useful references:
1- Microsoft® Office Access™ 2013 All-in-One Desk Reference for Dummies® Published by

Wiley Publishing, Inc. www.wiley.com, 2010 by Wiley Publishing, Inc.,
Indianapolis, Indiana

 2- Microsoft Access 2011 Instructor Edition Complete, Nicolet Avenue South, Microsoft

Publishing, Custom Guide, Inc., 2010.

3- Access 2012 Bible, Cary N. Prague, Michael R. Irwin, and Jennifer Reardon,
Wiley Publishing, Inc. 2013.

**3- Using Access Database for Data Analysis — Caveats, University of Massachusetts School of
Public Health. http://www-unix.oit.umass.edu/evagold/excel.html, Retrieved,2010.**

▪ Magazines and review (internet): **www. Microsoft.com and www.fanctionx.com .**

16. The Topics:

Weeks		Themes	
First Week	Lesson 1	Introduction to Databases	
	Lesson 2	Introduction to Bank Operation	
Second Week	Lesson 3	Creating a New Table	
	Lesson 4	Modifying a Table and Understanding Data Types	
	Activity	Adding, Editing, and Deleting Records	
Third Week	Lesson 5	Changing a Field's Data Type	
	Lesson 6	Using Field Descriptions	
Fourth Week	Lesson 7	Adding a Caption & Changing the Field Size	
	Lesson 8	Formatting Number, Currency, and Date/Time Fields	
Fifth Week	Lesson 9	Requiring Data Entry	
	Lesson 10	Creating an Input Mask	
	Activity	Assignment	
Sixth Week	Lesson 11	Adding a Primary Key to a Table	
	Lesson 12	Creating Relationships between Tables	
Seventh Week	Lesson 13	Importing Information	
	Lesson 14	Exporting Information	

Eighth Week	Mid Term Exam	Practical Exam
		Theoretical Exam
Ninth Week	Lesson 15	Introduction to Query
	Lesson 16	Creating a Select Query in Design View
Tenth Week	Lesson 17	Creating a Multiple Table Query – join Table
	Lesson 18	Creating a Report with Auto Report
Eleventh Week	Lesson 19	Entering and modifying data
	Lesson 20	Introduction to Variables types
Twelfth Week	Lesson 21	Descriptive Statistics
	Lesson 22	Import Data and Exporting File
	Activity	Frequency tables (& bar charts) for categorical variables
Thirteenth Week	Lesson 23	Contingency tables for categorical variables
	Lesson 24	Descriptive statistics (& histograms) for numerical variables
Fourteenth Week	Lesson 25	Using the Select Cases option for summaries for a subgroup of subjects/observations
	Lesson 26	Graphing your data
Final Exam		Practical Exam
		Theoretical Exam

17. Examinations:

1. Compositional:

Q/ what, is Access? What are its objects? Explain each object?

Microsoft Access is a powerful database program you can use to store all kinds of information—from a simple list of recipes to an inventory catalog with tens of thousands of products. Once information is stored in a Microsoft Access database, it's easy to find, analyze, and print.

Of all the programs in the Microsoft Office suite, Microsoft Access is the one that most intimidates people. "Mastering Microsoft Excel or Word was hard enough," they think. "How can I ever understand a complicated program like Access?" While it's true that Microsoft Access has many advanced features (there are computer

consultants whose only job is programming Access databases), creating and working with a Microsoft Access database is probably a whole lot easier than you think:

Tables: Tables store a database's data in rows (records) and columns (fields). For example, one table could store a list of customers and their addresses while another table could store the customers' orders. A database must always contain at least one table where it can store information—all the other database objects are optional.

Queries: Queries ask a question of data stored in a table. For example, a query might only display customers who are from Texas.

Forms: Forms are custom screens that provide an easy way to enter and view data in a table or query.

Reports: Reports present data from a table or query in a printed format.

Pages: A special type of Web page designed for viewing and working with Microsoft Access data from an intranet or over the Internet.

Macros: Macros help you perform routine tasks by automating them into a single command. For example, you could create a macro that automatically opens and prints a report.

Modules: Like macros, modules automate tasks but by using a built-in programming language called Visual Basic or VB. Modules are much more powerful and complex than macros.

2. True or false type of exams:

1- Required Commend is one field property.

2- Table is NOT a type of Microsoft Access database object. 3- In Primary Key Field You Can Enter Duplicate Value.

4- Record is a Columns In A Microsoft Access Table Called.

5- Reports and forms are similar but forms are used to print but reports to display on screen only.

6- Queries can include calculated fields that do not exist in table.

3. Multiple choices:

choose the right answer choice

1- To view and modify the Field Properties for a table, open the table in……. View.

    A. Table   C. Property

    B. Datasheet   D. Design

2- What is the maximum length a text field can be?

    A. 512 characters.   C. There is no limit to how long a text field can be.

    B. <u>255 characters</u>   D. 50 characters.

3- Which of the following database objects asks a question of information in a database and then displays the results?

    A. Tables.   C. Forms

    B. <u>Queries</u>.   D. Reports

4- Which of the following is NOT a data type?

    A. Text.   C. <u>Graphic</u>.

    B. Number.   D. Date/Time.

5- Which of the following types of queries are action queries?

    A. Parameter queries.   <u>C. Append queries.</u>

    B. Union queries.   D.Select queries.

- **Practice Examination** :

A) Create a Table content a filed **(ID – FullName –Mobile – Degree1 – Degree2)**, in field (Degree1 – Degree2) are not accept Negative Number, and (Mobile) not greater than 11 characters.

B) Create a form for date entry on table equation (A) and Add new Textbox for Average, and entry 15 Students.

C) Crete a form Start-up and add Command button for:

   1- Open form equation (A)

   2- Show these Students Pass in Average and on Line Korek telecom.

   3- Add 5 Degrees for these Students if Case Students Fill to pass.

   4- for exit to program.